



**Pennsylvania Department of Environmental Protection**

**208 West Third Street, Suite 101  
Williamsport, PA 17701-6448  
May 20, 1996**

**Northcentral Regional Office**

**Mr. Frank Klanchar  
US Environmental Protection Agency (3HW24)  
841 Chestnut Building  
Philadelphia, PA 19107-4431**

**RE: Soil Vapor Extraction Study  
Ruetgers-Nease Corporation  
(Centre County Kepone Site)  
College Township, Centre County**

**Dear Mr. Klanchar:**

**This letter is to formalize the Department's review comments of the April 5, 1996, submission by Golder Associates for a Soil Vapor Extraction (SVE) study conducted at the subject facility.**

- 1. The Department's primary concern with this document is the overall lack of depth discrete soil VOC data in the tank farm area. The SVE modeling appears to use accurate values for soil characteristics such as permeability, etc., but assumes that the contamination is uniformly spread throughout the vertical axis. If SVE is to be pursued as a remedial technology in the tank farm area, then additional boring is needed to delineate the vertical extent of VOC contamination.**
- 2. In conjunction with accurate VOC soils data, is the lack of a criteria used to site the four wells used in this study. No information is provided in the report to indicate whether comparable depth discrete VOC contamination was present at each well location. Perhaps one reason why the hydrofractured well was so successful in removing VOCs, compared to the three unfractured wells, was because its soil profile was far more contaminated with VOCs.**
- 3. The effectiveness of an SVE system should be based on reaching a preapproved asymptotic level. The Department believes that there is inadequate information at this time to determine the total amount of VOC contamination present in the tank farm area. Therefore, setting a total VOC removal volume is inappropriate. In conjunction with this issue, is the determination of the remaining levels of VOCs present in the soil profile after SVE has been conducted. A detailed soil boring program needs to be conducted to validate the efficiency of the SVE system.**

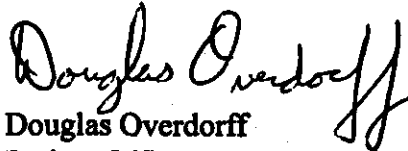


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The Department appreciates the opportunity to comment on this document. We may have additional comments in the near future pending further technical review. If you have any questions concerning the subject matter in this letter, please feel free to contact me at 717-321-6594.

Sincerely,



Douglas Overdorff  
Project Officer  
Environmental Cleanup

cc: L. Newcomer  
M. Kern  
P. Zaepfel - Central Office  
D. Brems - Central Office  
File

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